© Copyright Arrowstreet Inc.

SYMBOL LIST

TEL/DATA OUTLETS

W	WALL MOUNTED TELEPHONE OUTLET @ 48" A.F.F. REFER TO TEL/DATA RISER FOR WIRING REQUIREMENTS. COVER PLATES SHALL BE STAINLESS STEEL.
#	WALL MOUNTED DATA OUTLET @ 18" A.F.F. REFER TO TEL/DATA RISER FOR WIRING REQUIREMENTS. NUMERAL INDICATES NUMBER OF RJ45 JACKS ON SAME FACEPLATE. COVER PLATES SHALL BE STAINLESS STEEL.
#V/#D	COMBINATION TEL/DATA OUTLET @ 18" A.F.F. #V INDICATES NUMBER OF RJ45 VOICE JACKS, #D INDICATES NUMBER OF RJ45 DATA JACKS ON SAME FACEPLATE. (1) VOICE & (1) DATA IF #V/#D IS NOT SHOWN (TYPICAL). REFER TO TEL/DATA RISER FOR WIRING REQUIREMENTS. COVER PLATES SHALL BE STAINLESS STEEL.
AN	WIRELESS ACCESS NODE - DATA REFER TO TEL/DATA RISER FOR WIRING REQUIREMENTS. COVER PLATES SHALL BE STAINLESS STEEL. MOUNTED ABOVE CEILING U.N.O.
TVC	CABLE/DATA OUTLET REFER TO TEL/DATA RISER FOR WIRING REQUIREMENTS COVER PLATES SHALL BE STAINLESS STEEL. MOUNTED @ 84" A.F.F. U.N.O.
TVE	VIDEO PROJECTOR OUTLET REFER TO TEL/DATA RISER FOR WIRING REQUIREMENTS. COVER PLATES SHALL BE STAINLESS STEEL. CEILING MOUNTED U.N.O.
T	TEACHER'S STATION REFER TO TEL/DATA RISER FOR WIRING REQUIREMENTS COVER PLATES SHALL BE STAINLESS STEEL. MOUNTED @ 18" A.F.F. U.N.O.
IDF	INTERMEDIATE DISTRIBUTION FRAME
MDF	MAIN DISTRIBUTION FRAME
	WIRELESS SYSTEM CLOCK
S	FLUSH MOUNTED CEILING SPEAKER
S	FLUSH WALL MOUNTED SPEAKER
S WP	WEATHER PROOF FLUSH MOUNTED SPEAKER. FINISH TO BE SELECTED BY ARCH.
S S	SPEAKER CEILING TYPE SUBSCRIPT 'S' DENOTES SURFACE MOUNTED
ALS	ASSISTIVE LISTENING SYSTEM
SRP	SMART RESCUE PHONE
ARA	AREA RESCUE ASSISTANCE BUTTON
CS	CALL IN SWITCH
IP PG	PAGING SYSTEM IP INPUT
IP LS	PAGING SYSTEM IP OUTPUT FOR LOCAL SOUND SYSTEMS
IP MG	CRITICAL COMMUNICATION SYSTEM MASTER STATION (COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION)
IP TB	PAGING SYSTEM IP TALKBACK MODULE

RECEPTACLES

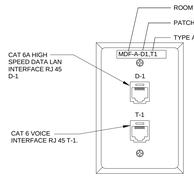
	FLUSH FLOOR OUTLET BOXES WITH BOTH 120 VOLT & TELE/DATA COMPARTMENTS FLOOR BOX BY OTHERS. BRASS COVER PLATE BY I.T. CONTRACTOR.
	FLUSH FLOOR OUTLET BOXES WITH BOTH 120 VOLT & DATA COMPARTMENTS. FLOOR BOX BY OTHERS. BRASS COVER PLATE BY I.T. CONTRACTOR.
	WIREMOLD RACEWAY PROVIDED UNDER SECTION 260000

LOCAL SOUND SYSTEMS

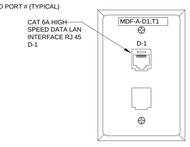
AMP	LOCAL SOUND SYSTEM AMPLIFIER-SEE SPEC FOR DETAILS
LS	HIGH OUTPUT SPEAKER FOR LOCAL SOUND SYSTEM-SEE SPEC FOR DETAILS
S LS	CEILING FLUSH MTD HIGH OUTPUT SPEAKER FOR LOCAL SOUND SYSTEM-SEE SPEC FOR DETAILS
CS	CEILING MTD HIGH OUTPUT SPEAKER FOR LOCAL SOUND SYSTEM-SEE SPEC FOR DETAILS
M	MICROPHONE
V	VOLUME CONTROL
S	SOUND SPHERE SPEAKER
S WP	WEATHER PROOF SPEAKER. FINISH TO BE SELECTED BY ARCH.
R	PRIORITY RELAY
S	FLUSH WALL MOUNTED SPEAKER
S WP	WEATHER PROOF SPEAKER. FINISH TO BE SELECTED BY ARCH.
M	MICROPHONE
AU	RCA AUDIO INPUT JACK
A1	ANTENNA WALL PLATE
A	AUDIO INPUT PLATE

ABBREVIATIONS

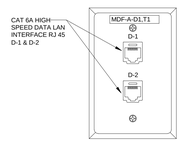
A.F.F.	ABOVE FINISHED FLOOR	P.C.	PLUMBING CONTRACTOR
A.F.G.	ABOVE FINISHED GRADE	M.H.	MOUNTING HEIGHT
APC	ANGLE POLISHED CONNECTOR	W.P.	WEATHER PROOF
ARCH.	ARCHITECT	U.N.O.	UNLESS NOTED OTHERWISE
A.T.C.	AUTO-TEMP CONTROL CONTRACTOR	WG	WIRE GUARD
℄	CENTERLINE	CATV	CABLE TELEVISION
CLG.	CEILING	DH	DOOR HOLDER
E.C.	ELECTRICAL CONTRACTOR	F.A.C.P.	FIRE ALARM CONTROL PANEL
F&I	FURNISHED AND INSTALLED	PAC	PUBLIC ACCESS COMPUTER
F.P.C.	FIRE PROTECTION CONTRACTOR	MAC	MACINTOSH COMPUTER
G.C.	GENERAL CONTRACTOR	I.T.	INFORMATION TECHNOLOGY
H.V.A.C.	HEATING, VENTILATION, AND AIR CONDITIONING CONTRACTOR	IESS	INTEGRATED ELECTRONIC SECURITY SYSTEM INTEGRATOR



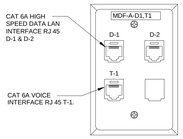
1 T0.01 TYPICAL WALL MTD VOICE/DATA OUTLET ( ) DETAIL
SCALE: NTS



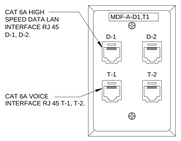
2 T0.01 TYPICAL DATA OUTLET ( ) DETAIL
SCALE: NTS



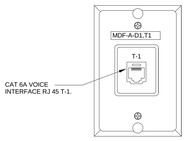
3 T0.01 TYPICAL DATA OUTLET ( ) DETAIL
SCALE: NTS



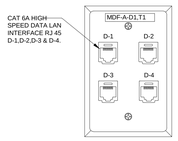
4 T0.01 TYPICAL DATA OUTLET ( ) DETAIL
SCALE: NTS



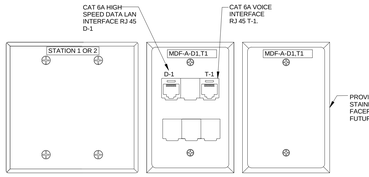
5 T0.01 TYPICAL DATA OUTLET ( ) DETAIL
SCALE: NTS



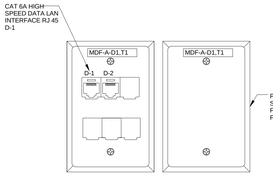
6 T0.01 TYPICAL WALL PHONE OUTLET ( ) DETAIL
SCALE: NTS



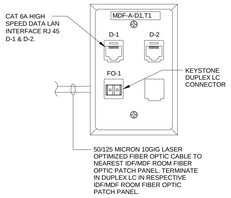
7 T0.01 TYPICAL DATA OUTLET ( ) DETAIL
SCALE: NTS



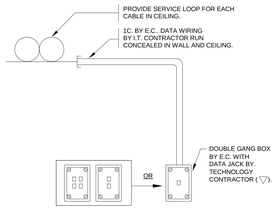
8 T0.01 TYPICAL TEACHER STATION OUTLET( ) DETAIL
SCALE: NTS



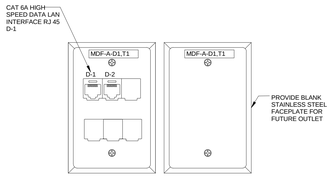
9 T0.01 LCD PROJECTOR JACK OUTLET(TVE) DETAIL
SCALE: NTS



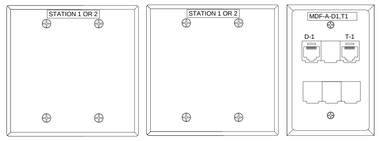
10 T0.01 TYPICAL OUTLET ( ) DETAIL
SCALE: NTS



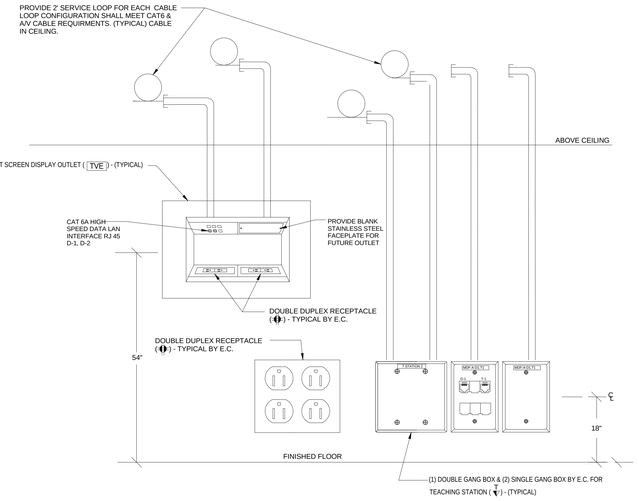
11 T0.01 DATA OUTLET DETAIL
SCALE: NTS



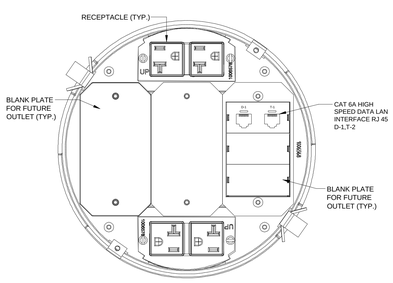
13 T0.01 LCD/LED DISPLAY JACK OUTLET(TVC) DETAIL
SCALE: NTS



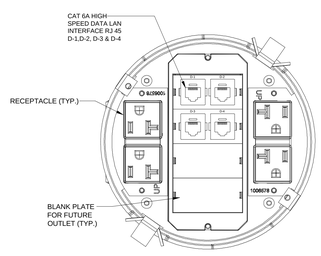
14 T0.01 LCD/LED DISPLAY JACK OUTLET(TVD) DETAIL
SCALE: NTS



17 T0.01 TYPICAL TEACHER STATION JACK OUTLET (TVE) DETAIL
SCALE: NTS



15 T0.01 TYPICAL 8" POKE THRU DATA OUTLET ( )DETAIL
NOT TO SCALE



16 T0.01 TYPICAL 6" POKE THRU DATA & VOICE OUTLET ( ) DETAIL
SCALE: NTS

CLIENT:

ARCHITECT:

ARROWSTREET
ARCHITECTURE & DESIGN

10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
www.arrowstreet.com

CONSULTANTS:

GARCIA GALUSKA DESOUSA
CONSULTING ENGINEERS INC.
375 Faunce Corner Road - Suite D, Dartmouth, MA 02747 - 1258
508 - 998 - 5700 FAX 508 - 998 - 0802 E - MAIL info@g - g - d . com

PROJECT INFORMATION:

NECP

687 Watertown Street
Newton, MA 02460

ISSUANCE:

CONSTRUCTION DOCUMENTS

STAMP:

REVISIONS:

No.	Date	Description
1	7.22.19	SCHEM. DESIGN

PROJECT NORTH
TRUE NORTH

DRAWING TITLE:

TECHNOLOGY SYMBOL LIST & DETAILS

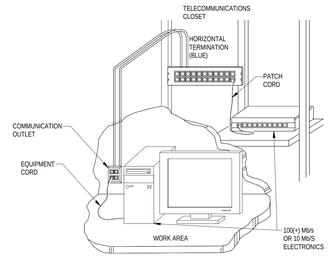
Project No.	19001
Dwn/Chk By	MFM/DMP
Date	02/28/20
Scale	

DRAWING NUMBER:

T0.01

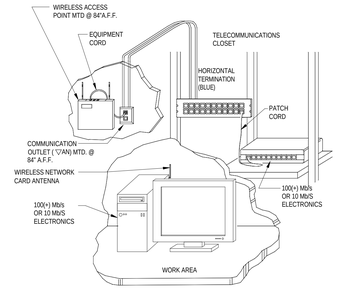
2/28/2020 5:12:53 PM

© Copyright Arrowstreet Inc.



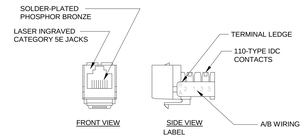
1 / T0.02 TYPICAL INTERCONNECTION ARCHITECTURE

NOT TO SCALE



2 / T0.02 TYPICAL WIRELESS INTERCONNECTION ARCHITECTURE

NOT TO SCALE

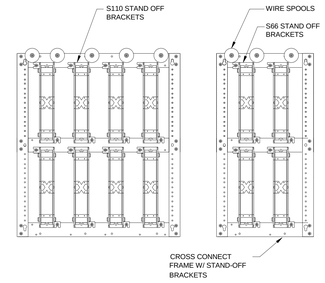


3 / T0.02 RJ45 CONNECTION DETAILS

NOT TO SCALE

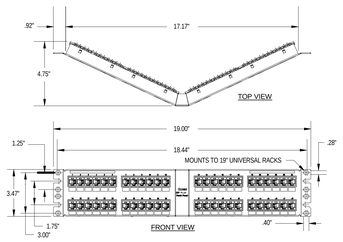
NOTE

PANELS SHALL BE UL LITSED; MEET NATIONAL ELECTRICAL CODE REQUIREMENTS AND SPECIFICATIONS FOR UL 1863; AND FULLY COMPLY WITH FCC PART 68 AND TIA-568-A CATEGORY 5E.



4 / T0.02 TYPICAL CROSS CONNECT

NOT TO SCALE

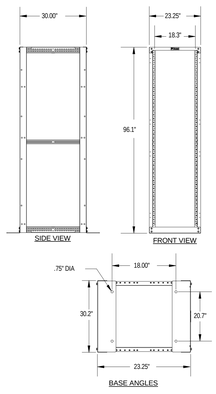


5 / T0.02 48 PORT CAT 6A PATCH PANEL

NOT TO SCALE

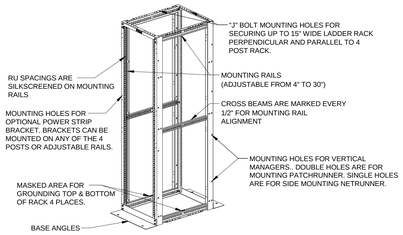
NOTE

PANELS SHALL BE UL LISTED; MEET NATIONAL ELECTRICAL CODE REQUIREMENTS AND SPECIFICATIONS FOR UL 1863; AND FULLY COMPLY WITH FCC PART 68 AND TIA-568-A CATEGORY 6.



NOTES:

1. CAN BE USED WITH ANY EIA STANDARD COMPONENT IN ADDITION TO ALL PANDUIT HORIZONTAL CABLE MANAGEMENT AND PATCH PANEL PRODUCTS.
2. 52 AVAILABLE RACK SPACES.
3. RU SPACINGS NUMBERS ARE CLEARLY PRINTER ON MOUNTING RAILS.
4. EASY ASSEMBLY. ONE WRENCH NEEDED TO INSTALL BOLTS INTO WELDNUTS IN ALL 8 CORNERS.
5. FULLY BONDED STRUCTURE WHEN ASSEMBLED PER INSTRUCTIONS.
6. LOAD RATING - 2000 LBS.



6 / T0.02 4 POST RACK

SCALE: N.T.S.

CLIENT:

ARCHITECT:

ARROWSTREET
ARCHITECTURE & DESIGN

10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
www.arrowstreet.com

CONSULTANTS:

GARCIA GALUSKA DESOUSA
CONSULTING ENGINEERS INC.
375 Faunce Corner Road - Suite D, Dartmouth, MA 02747 - 1258
508 - 998 - 5700 FAX 508 - 998 - 0802 E - MAIL info@g - g - d . com

PROJECT INFORMATION:

NECP

687 Watertown Street
Newton, MA 02460

ISSUANCE:

CONSTRUCTION DOCUMENTS

STAMP:

REVISIONS:

No.	Date	Description

TRUE NORTH / PROJECT NORTH

DRAWING TITLE:

TECHNOLOGY DETAILS

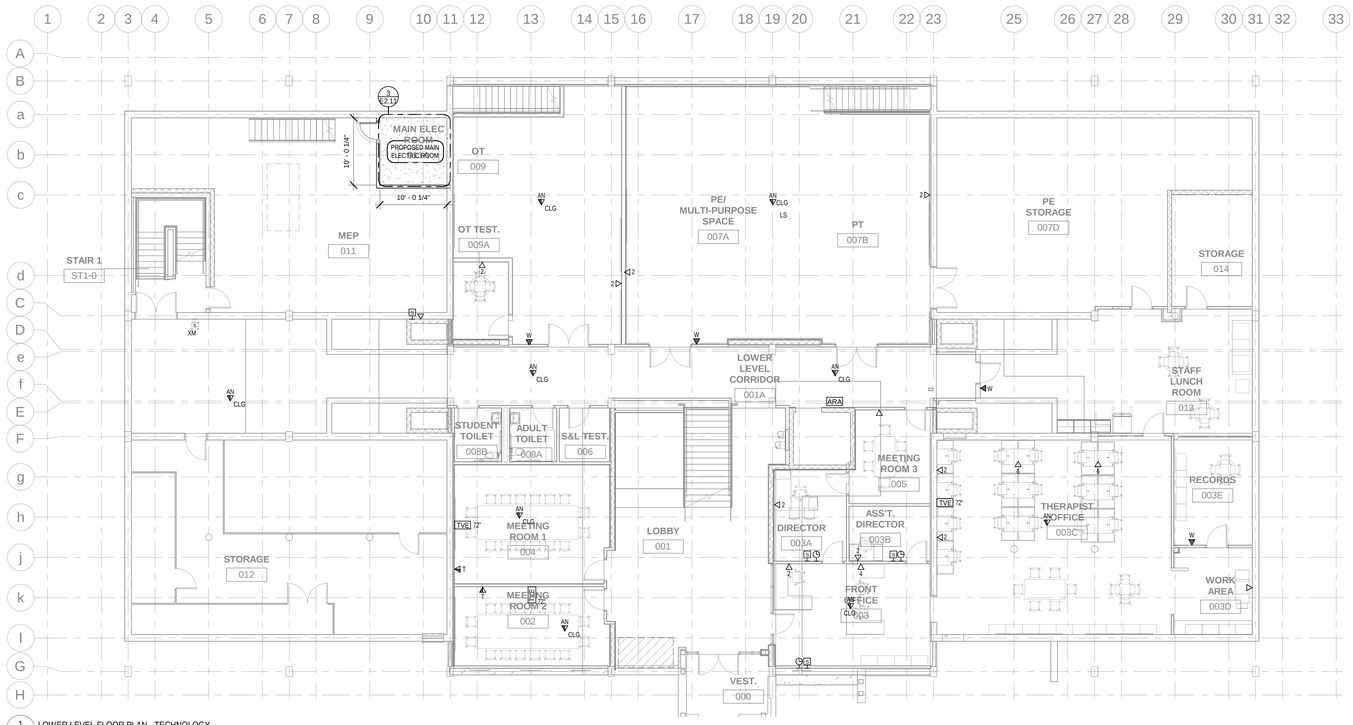
Project No.	**19001**
Dwn/Chk By	**MFM/DMP**
Date	**02/28/20**
Scale	

DRAWING NUMBER:

T0.02

2/28/2020 5:12:53 PM

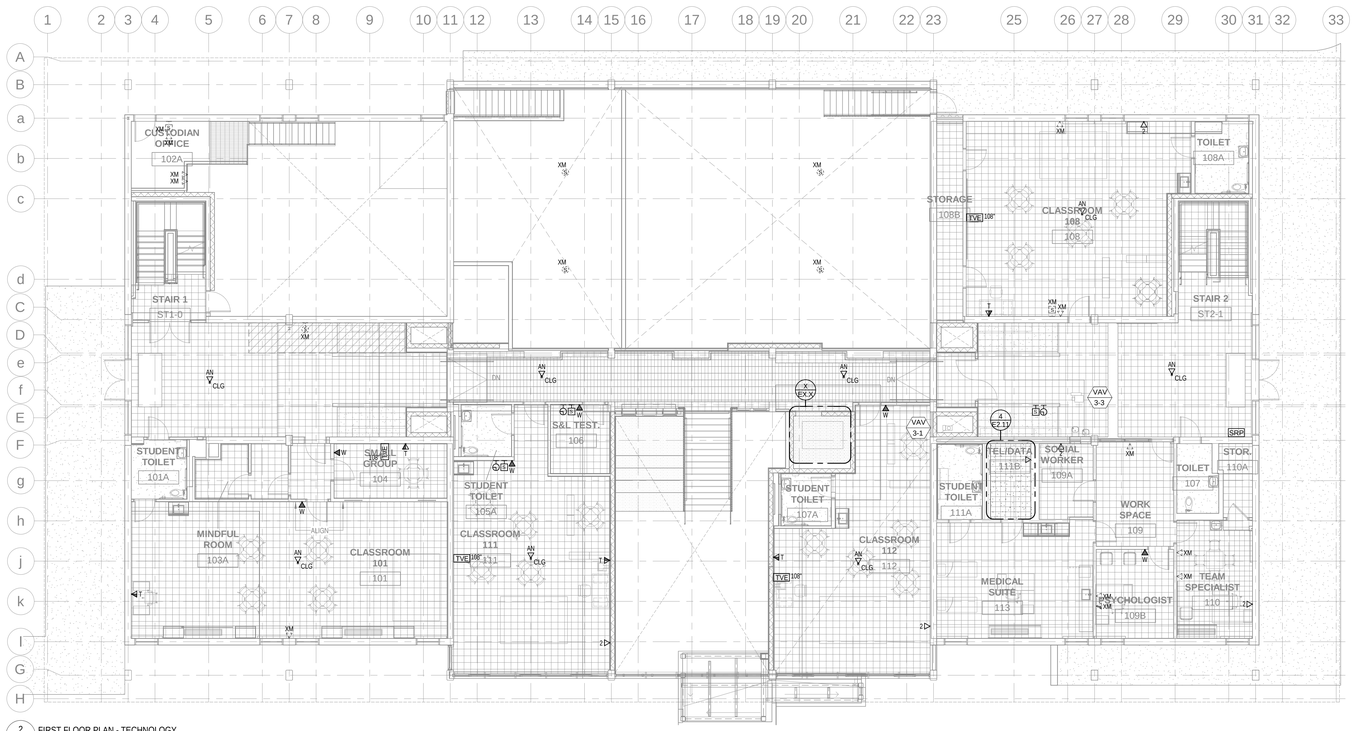
© Copyright Arrowstreet Inc.



1 / T1.11 LOWER LEVEL FLOOR PLAN - TECHNOLOGY
SCALE: 1/8" = 1'-0"

GENERAL TECHNOLOGY NOTES:

1. COMMUNICATIONS OUTLETS ARE SHOWN FOR REFERENCE PURPOSES. EXACT LOCATIONS WILL BE AS SHOWN ON ELECTRICAL DRAWINGS. COORDINATE INSTALLATION OF ALL CABLING WITH ELECTRICAL SUBCONTRACTOR.
2. KEEP COMMUNICATIONS CABLING AT LEAST 12" AWAY FROM POWER WIRING.
3. ALL CONDUITS AND JUNCTION BOXES TO BE PROVIDED UNDER DIVISION 260000. CONDUITS SHOWN ARE FOR REFERENCE ONLY.



2 / T1.11 FIRST FLOOR PLAN - TECHNOLOGY
SCALE: 1/8" = 1'-0"

CLIENT:

ARCHITECT:

ARROWSTREET
ARCHITECTURE & DESIGN

10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
www.arrowstreet.com

CONSULTANTS:

GARCIA GALUSKA DESOUSA
CONSULTING ENGINEERS INC.
375 Faunce Corner Road - Suite D, Dartmouth, MA 02747 - 1258
508 - 998 - 5700 FAX 508 - 998 - 0802 E - MAIL info@g - g - d . com

PROJECT INFORMATION:

NECP

687 Watertown Street
Newton, MA 02460

ISSUANCE:

CONSTRUCTION DOCUMENTS

STAMP:

REVISIONS:

No.	Date	Description
1	7.22.19	SCHEM. DESIGN

PROJECT NORTH
TRUE NORTH

DRAWING TITLE:

LOWER LEVEL & FIRST FLOOR PLAN - TECHNOLOGY

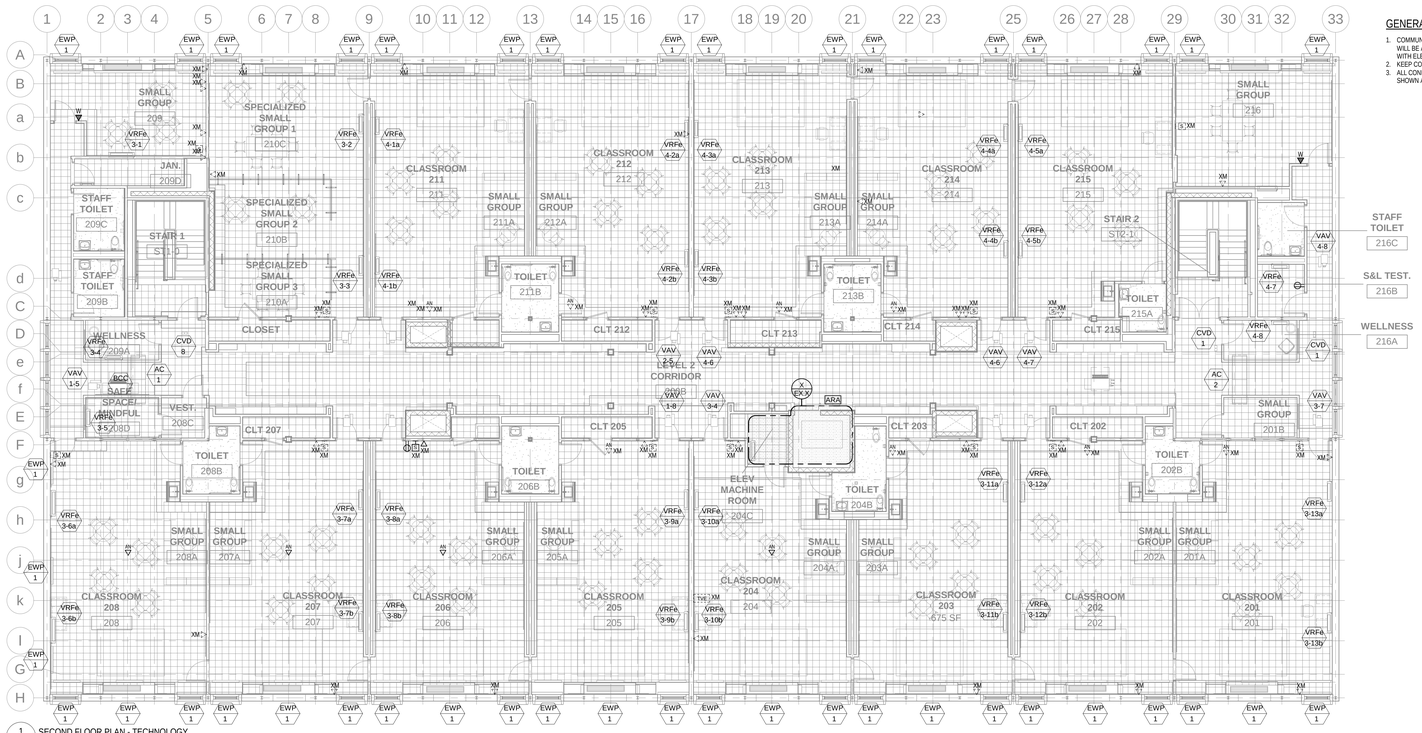
Project No.	**19001**
Dwn/Chk By	**MFM/DMP**
Date	**02/28/20**
Scale	**As indicated**

DRAWING NUMBER:

T1.11

2/28/2020 5:12:56 PM

© Copyright Arrowstreet Inc.



1 / T1.12 SECOND FLOOR PLAN - TECHNOLOGY
SCALE: 1/8" = 1'-0"

GENERAL TECHNOLOGY NOTES:

1. COMMUNICATIONS OUTLETS ARE SHOWN FOR REFERENCE PURPOSES. EXACT LOCATIONS WILL BE AS SHOWN ON ELECTRICAL DRAWINGS. COORDINATE INSTALLATION OF ALL CABLING WITH ELECTRICAL SUBCONTRACTOR.
2. KEEP COMMUNICATIONS CABLING AT LEAST 12" AWAY FROM POWER WIRING.
3. ALL CONDUITS AND JUNCTION BOXES TO BE PROVIDED UNDER DIVISION 260000. CONDUITS SHOWN ARE FOR REFERENCE ONLY.

CLIENT:

ARCHITECT:

ARROWSTREET
ARCHITECTURE & DESIGN

10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
www.arrowstreet.com

CONSULTANTS:

GARCIA GALUSKA DESOUSA
CONSULTING ENGINEERS INC.
375 Faunce Corner Road - Suite D, Dartmouth, MA 02747 - 1258
508 - 998 - 5700 FAX 508 - 998 - 0882 E - MAIL info@g - g - d . com

PROJECT INFORMATION:

NECP

687 Watertown Street
Newton, MA 02460

ISSUANCE:

CONSTRUCTION DOCUMENTS

STAMP:

REVISIONS:

No.	Date	Description
1	7.22.19	SCHEM. DESIGN

PROJECT NORTH
TRUE NORTH

DRAWING TITLE:

SECOND FLOOR & ROOF PLAN - TECHNOLOGY

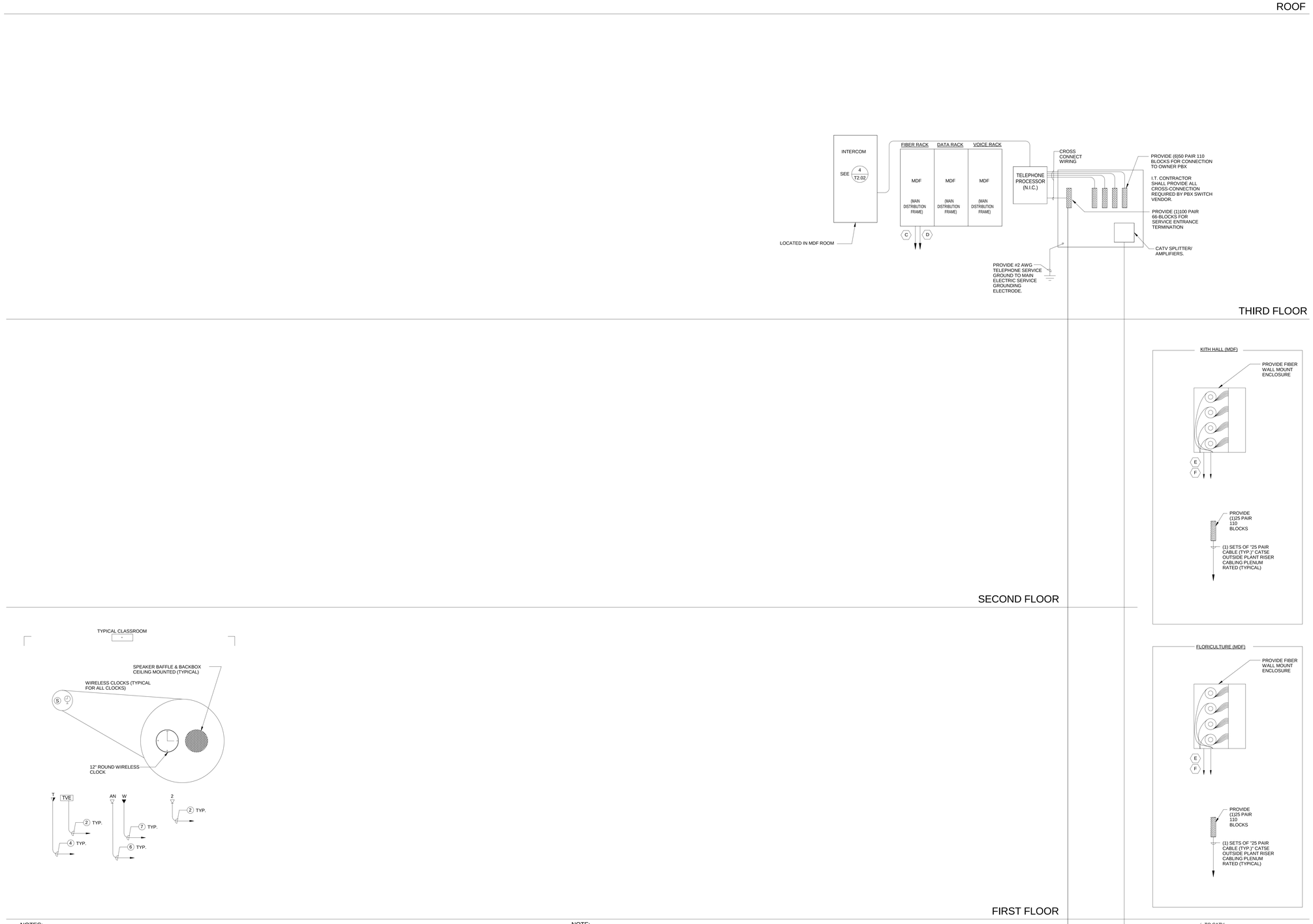
Project No.	19001
Dwn/Chk By	MFM/DMP
Date	02/28/20
Scale	As indicated

DRAWING NUMBER:

T1.12

2/28/2020 5:12:59 PM

© Copyright Arrowstreet Inc.



NOTES:

1. - (1) CAT 6A UTP CABLES PLENUM RATED TO IDF/MDF DATA RACK IN BLOCKED AREA (TYPICAL)
2. - (2) CAT 6A UTP CABLES PLENUM RATED TO IDF/MDF DATA RACK IN BLOCKED AREA (TYPICAL)
3. - (4) CAT 6A UTP CABLES PLENUM RATED TO IDF/MDF DATA RACK IN BLOCKED AREA (TYPICAL)
4. - (1) CAT 6A UTP CABLE PLENUM RATED TO IDF/MDF DATA RACK IN BLOCKED AREA & (1) CAT 6A UTP CABLE PLENUM RATED TO IDF/MDF VOICE RACK IN BLOCKED AREA (TYPICAL)
5. - (2) CAT 6A UTP CABLES PLENUM RATED TO IDF/MDF DATA RACK IN BLOCKED AREA & (1) CAT 6A UTP CABLES PLENUM RATED TO IDF/MDF VOICE RACK IN BLOCKED AREA
6. - (2) CAT 6A UTP CABLES PLENUM RATED TO IDF/MDF IN BLOCKED AREA. 2 STRAND MULTI-MODE LASER OPTIMIZED ARMORED FIBER CABLE TO IDF/MDF IN BLOCKED AREA (TYPICAL)
7. - (1) CAT 6A UTP CABLE PLENUM RATED TO IDF/MDF VOICE RACK IN BLOCKED AREA (TYPICAL)

NOTE:

A. 12 STRAND MULTI-MODE FIBER CABLE TO MDF. INSTALL PLENUM RATED INNER-DUCT.
B. 6 STRAND SINGLE MODE 8/9 MICRON FIBER CABLE TO MDF. INSTALL PLENUM RATED INNER-DUCT.
C. 84 STRAND MULTI-MODE OUTSIDE PLANT FIBER CABLE TO MDF. INSTALL PLENUM RATED INNER-DUCT.
D. 42 STRAND SINGLE MODE 8/9 MICRON OUTSIDE PLANT FIBER CABLE TO MDF. INSTALL PLENUM RATED INNER-DUCT.
E. 12 STRAND MULTI-MODE OUTSIDE PLANT FIBER CABLE TO MDF. INSTALL PLENUM RATED INNER-DUCT.
F. 6 STRAND SINGLE MODE 8/9 MICRON OUTSIDE PLANT FIBER CABLE TO MDF. INSTALL PLENUM RATED INNER-DUCT.

1. THIS CONTRACTOR SHALL PROVIDE FOR A COMPLETE INSTALLATION. FURNISH ALL EQUIP. LABOR, WIRING AND OUTLETS REQUIRED FOR A COMPLETELY OPERATIONAL SYSTEM.
2. ALL WIRING SHALL BE IN ACCORDANCE WITH EQUIPMENT SUPPLIER. COORDINATE ALL WIRING REQUIREMENTS PRIOR TO ROUGHING-IN.
3. PROVIDE APPROPRIATE QUANTITIES OF DATA PATCH PANELS TO ACCOMODATE ALL RESPECTIVE DATA CIRCUITS.
4. PROVIDE CAT 6A PATCH CORDS TO MATCH TOTAL QUANTITY OF PATCH PANEL PORTS. AT BOTH MDF/IDF AND WORK STATION.

CLIENT:

ARCHITECT:

ARROWSTREET
ARCHITECTURE & DESIGN

10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
www.arrowstreet.com

CONSULTANTS:

GARCIA GALUSKA DESOUSA
CONSULTING ENGINEERS INC.
375 Faunce Corner Road - Suite D, Dartmouth, MA 02747 - 1258
508 - 998 - 5700 FAX 508 - 998 - 0802 E - MAIL info@g - g - d . com

PROJECT INFORMATION:

NECP

687 Watertown Street
Newton, MA 02460

ISSUANCE:

CONSTRUCTION DOCUMENTS

STAMP:

REVISIONS:

No.	Date	Description
1	7.22.19	SCHEM. DESIGN

PROJECT NORTH
TRUE NORTH

DRAWING TITLE:

TECHNOLOGY RISER DIAGRAM

Project No.	**19001**
Dwn/Chk By	**MFM/DMP**
Date	**02/28/20**
Scale	

DRAWING NUMBER:

T2.01

2/28/2020 5:13:00 PM

© Copyright Arrowstreet Inc.

MAIN DISTRIBUTION FRAME MDF

LOCATION: MDF (MDF XXX)

CAT 6A (RJ45) VOICE PORT			CAT 6A (RJ45) DATA PORTS		
USED	SPARE	PATCH PANEL SIZE	USED	SPARE	PATCH PANEL SIZE
-	-	(-) 48 PORT	-	-	(-) 48 PORT

INTERMEDIATE DISTRIBUTION FRAME IDF

LOCATION: IDF-1B (XXX)

-	-	(-) 48 PORT	-	-	(-) 48 PORT

INTERMEDIATE DISTRIBUTION FRAME IDF

LOCATION: IDF-2B (XXX)

-	-	(-) 48 PORT	-	-	(-) 48 PORT

QUANTITY OF DEVICES

MDF (MDF XXX)

		DATA (CAT 6A)	VOICE (CAT 6A)
	= -	-	-
2	= -	-	-
4	= -	-	-
AN	= -	-	-
	= -	-	-
1V/2D	= -	-	-
W	= -	-	-
T	= -	-	-
TVE	= -	-	-
TVC	= -	-	-
TOTAL		-	-

QUANTITY OF DEVICES

IDF-1B (DATA XXX)

		DATA (CAT 6A)	VOICE (CAT 6A)
	= -	-	-
2	= -	-	-
4	= -	-	-
AN	= -	-	-
	= -	-	-
1V/2D	= -	-	-
W	= -	-	-
T	= -	-	-
TVE	= -	-	-
TVC	= -	-	-
TOTAL		-	-

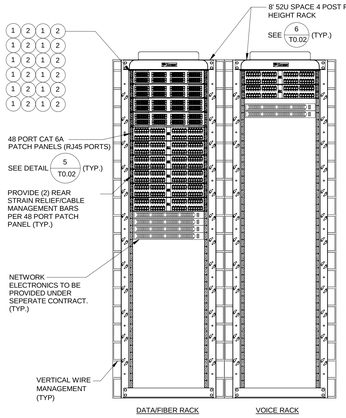
QUANTITY OF DEVICES

IDF-2B (DATA XXX)

		DATA (CAT 6A)	VOICE (CAT 6A)
	= -	-	-
2	= -	-	-
4	= -	-	-
AN	= -	-	-
	= -	-	-
1V/2D	= -	-	-
W	= -	-	-
T	= -	-	-
TVE	= -	-	-
TVC	= -	-	-
TOTAL		-	-

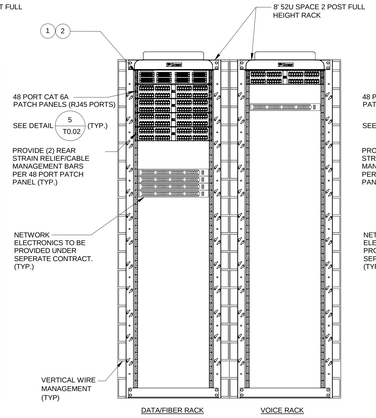
CABLE/FIBER SCHEDULE

1. FIBER OPTIC MULTIMODE LIU (LIGHTGUIDE INTERFACE UNIT) PATCH PANEL (12 PORT - SC CONNECTORS) - PREMISES DISTRIBUTION
2. FIBER OPTIC SINGLEMODE LIU (LIGHTGUIDE INTERFACE UNIT) PATCH PANEL (6 PORT - ST CONNECTORS) - PREMISES DISTRIBUTION
3. FIBER OPTIC SINGLEMODE LIU (LIGHTGUIDE INTERFACE UNIT) PATCH PANEL (12 PORT - ST CONNECTORS) - PREMISES DISTRIBUTION



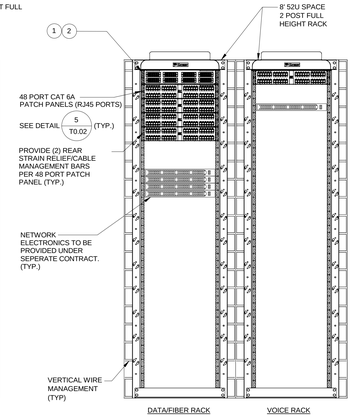
1 T2.02 MDF DETAIL

NOT TO SCALE



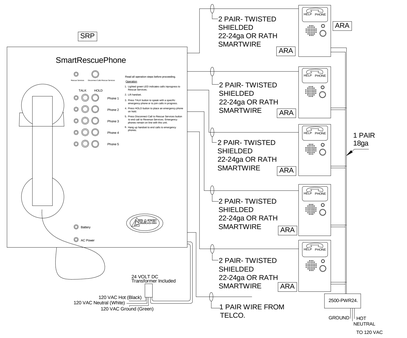
2 T2.02 TYPICAL IDF DETAIL

NOT TO SCALE



3 T2.02 TYPICAL IDF DETAIL

NOT TO SCALE



4 T2.02 SMARTRESCUE BASE STATION WIRING DIAGRAM

SCALE: N.T.S.

SRP SMART RESCUE PHONE

ARA AREA RESCUE ASSISTANCE BUTTON

CLIENT:

ARCHITECT:

ARROWSTREET
ARCHITECTURE & DESIGN

10 POST OFFICE SQUARE
SUITE 700N
BOSTON MA 02109
617.623.5555
www.arrowstreet.com

CONSULTANTS:

GARCIA GALUSKA DESOUSA
CONSULTING ENGINEERS INC.
375 Faunce Corner Road - Suite D, Dartmouth, MA 02747 - 1258
508 - 998 - 5700 FAX 508 - 998 - 0883 E - MAIL info@g - g - d . com

PROJECT INFORMATION:

NECP

687 Watertown Street
Newton, MA 02460

ISSUANCE:

CONSTRUCTION DOCUMENTS

STAMP:

REVISIONS:

No.	Date	Description
1	7.22.19	SCHEM. DESIGN

PROJECT NORTH
TRUE NORTH

DRAWING TITLE:

TECHNOLOGY DETAILS

Project No.	**19001**
Dwn/Chk By	**MFM/DMP**
Date	**02/28/20**
Scale	

DRAWING NUMBER:

T2.02

2/28/2020 5:13:01 PM